Testing Drinking Water

Water testing and treatment are expensive and inconvenient, but are necessary to ensure residents have access to a safe and reliable source of water. The cost associated with testing and treatment of public water supplies is passed along to consumers through their water bills. Individuals relying on private wells do not have this benefit and must seek testing on their own.

Current South Carolina state regulation requires that the Department of Health and Environmental Control (DHEC) be notified of any new private drinking wells before installation. Part of the permitting process includes water quality testing. Residents with established wells can also submit samples for testing to DHEC’s Private Well Program and Environmental Quality Control (EQC) Laboratories.

Residents with a public water supply cannot send samples to DHEC for testing. Public water supplies perform testing on a regular basis as required by Federal and State standards. They are required to produce an annual Consumer Confidence Report (CCR) that contains information about the quality of the water delivered and the risks, if any, from exposure to contaminants detected in the drinking water. If you receive water from a public water supply, contact local management for water quality information. You may also contact DHEC’s Drinking Water Protection Division at 803-898-4300 if you are not provided with the information you need. If you are not satisfied with the response or have reason to believe there is a problem with the water supply, you may have a water sample tested by a commercial laboratory. Commercial laboratories charge a fee for this service. A listing of certified commercial laboratories is included at the end of this publication.

Testing of Private Drinking Water Wells

DHEC’s Private Well Program and Environmental Quality Control (EQC) Laboratories perform residential well testing for a variety of parameters for a fee. Information about types of tests and fees can be found at: http://www.scdhec.gov/Environment/WaterQuality/ResidentialWells/WellWaterTesting/

Bacteriological analysis is the most requested test as this is the primary indicator of water safety. A sample is first tested for the presence of total coliform bacteria, which are common in the environment and generally not harmful. If coliform bacteria are detected, the sample is then tested for a specific species of coliform bacteria known as *Escherichia coli* (*E. coli*), which can cause illness.

Water Testing Instructions for Bacteriological Analysis

1. Pick up a water sample kit from any DHEC County Office. There are four regional EQC offices but additional offices are located in each region. Contact your local EQC office for additional location information.
2. Remove any strainers or aerators from the faucet. Rub the outside of the faucet with rubbing alcohol or bleach. Allow the water to run for four to five minutes.
3. Without changing the flow from the faucet, remove the cap from the sample bottle and fill the bottle to about one inch from the top. Don’t touch the inside of the bottle or cap, or let the water splash from your hands into the bottle. Replace the cap.
4. Fill out all of the information on the sample form that applies to you. You must complete your name, mailing address, daytime
you are experiencing problems such as: taste or smell of your water, staining of laundry, or plumbing fixtures, or are considering installing a water treatment system, you might want to have a minerals and metals analysis, which is the other common analysis conducted for residential well water. The parameters tested include: Chloride, Nitrate/Nitrite, Calcium, Copper, Iron, Magnesium, Manganese, Lead, Zinc, Alkalinity, and pH. A DHEC provided container should be used for collecting your sample. These can be obtained from your local health department. Once your sample has been collected, take it to your local DHEC office and complete Form 1905. You will receive your results in about six to eight weeks along with an invoice for $50 and a booklet explaining the results.

Additional Resources

- SC DHEC Drinking Water Permits, Compliance, Monitoring
  http://www.scdhec.gov/environment/WaterQuality/DrinkingWater/
- EPA Water: Consumer Information -
  http://water.epa.gov/drink/info/index.cfm
- CDC Drinking Water -
  http://www.cdc.gov/healthywater/drinking/

Commercial Laboratories for Total Coliform/E. Coli (as of April 2015)

<table>
<thead>
<tr>
<th>Lab Name/Address</th>
<th>Director Name/Phone Number</th>
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<tbody>
<tr>
<td>Access Analytical Inc. Hampton</td>
<td>Douglas James 803-914-0006</td>
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<tr>
<td>303 First St. W</td>
<td></td>
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<tr>
<td>Hampton SC  29934</td>
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<tr>
<td>Access Analytical Inc. Irmo</td>
<td>Amick, Ashley B 803-454-8983</td>
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<tr>
<td>7478 Carlisle St</td>
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<td>Irmo SC 29063</td>
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<td>Access Analytical Inc Lexington</td>
<td>Boyd, Bryant 803-939-4983</td>
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<tr>
<td>200 Rich Lex Dr</td>
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</tr>
<tr>
<td>Lexington SC 29072-9274</td>
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<tr>
<td>Aquatic Analytics LLC</td>
<td>Miller, Samantha 843-471-1933</td>
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<tr>
<td>1180 Drop Off Dr Ste 101</td>
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<tr>
<td>Summerville SC 29483-7233</td>
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<tr>
<td>Blackman Laboratory Inc Hartsville</td>
<td>Brand, Shelly 843-332-2973</td>
</tr>
<tr>
<td>953 N Rolling Rd</td>
<td></td>
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<tr>
<td>Hartsville SC 29550-7765</td>
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<tr>
<td>Data Resources Greenville</td>
<td>Watt, Bruce E 803-561-0331</td>
</tr>
<tr>
<td>2320 E North St Ste D</td>
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</tr>
<tr>
<td>Greenville SC 29607</td>
<td></td>
</tr>
<tr>
<td>Davis &amp; Brown</td>
<td>Ward, William V 843-665-6746</td>
</tr>
<tr>
<td>PO Box 15038</td>
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<tr>
<td>Quinby SC 29506</td>
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<tr>
<td>Gel Laboratories Llc Greenville</td>
<td>Bocklet, Carey J 864-676-2202</td>
</tr>
<tr>
<td>111 Smith Hines Rd Ste J</td>
<td></td>
</tr>
<tr>
<td>Greenville SC 29607-5745</td>
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</tbody>
</table>
General Environmental Laboratories Inc  
PO Box 21866  
Hilton Head SC 29925  
Patel, Sheila  
843-208-2006

Goldie & Associates Inc  
210 W North 2nd St  
Seneca SC 29678-3235  
Day, Ben S  
864-882-8194

James H Carr & Associates Inc  
PO Box 90209  
Columbia SC 29290-0209  
Carr, James H  
803-776-7789

JG Environmental Inc  
7776 Flat Rock Rd  
Kershaw SC 29067  
Gardner, Rick  
803-475-6570

L&L Environmental Ware Shoals  
PO Box 359  
Ware Shoals SC 29692  
Pulley, Brian J  
864-456-2696

Pace Analytical Services Inc Greenwood  
816 Durst Ave E  
Greenwood SC 29649-2908  
Grogan, Felicia  
864-229-4413

Rogers & Callcott Columbia  
PO Box 5655  
Greenville SC 29606  
Avery, Sam  
866-805-9596

Rogers & Callcott Engineers Inc  
PO Box 5655  
Greenville SC 29606  
Avery, Sam  
866-805-9596

Shealy Environmental Services Inc  
106 Vantage Point Dr  
West Columbia SC 29172  
Wright, Dan  
803-791-9700

Southeastern Environmental LLC  
4458 Augusta Rd Ste 2b  
Lexington SC 29073-7570  
Kates, Jack W  
803-359-8378

Texidyne Inc  
PO Box 1646  
Clemson SC 29633  
Goodman, Grant  
864-639-6207

Trident Labs Services Inc  
9104 Canvas Ln  
Ladson SC 29456  
Lewis, Melinda  
843-871-4999

Sources of Significant Contribution:
1. SC DHEC “Testing Your Drinking Water”
2. SC DHEC “Water Testing Instructions”
3. SC DHEC “Well Water Quality Testing Services”

Prepared by Terasa Lott, Extension Associate Agent, Clemson University. Reviewed by Douglas B. Kinard, P.E. (Director, Drinking Water Protection Division, Bureau of Water, SC DHEC) 07/15.

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